From: Rose Longoria

To: <u>Eric Blischke/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA</u>

Cc: sheila@ridolfi.com; 'Rob Neely'; 'Robert Dexter'

Subject: FW: Background and PRG comments for TCT call

Date: 07/15/2008 11:47 AM

Eric / Chip -

Below are comments on the Background Calculation and PRG's in preparation for tomorrow's TCT meeting.

~rose

From: Sheila Fleming [mailto:sheila@ridolfi.com]

Sent: Tuesday, July 15, 2008 11:36 AM

To: rose@yakama.com **Cc:** Robert Dexter

Subject: Background and PRG comments for TCT call

Rose,

Ridolfi reviewed LWG's Background Data Processing and Outlier Identification memo dated July 3, 2008 and the correspondence related to development of the PRGs. We have prepared the following comments for discussion on tomorrow's TCT call. We are also in the process of reviewing EPA's R2 Report comment clarification table, Burt's TRV update email, and Eric's bioassay evaluation email so we will be prepared to discuss these items tomorrow as well.

Background Calculation

- 1. Section II. Data Processing, Item 1. LWG proposes averaging field replicates. There have been many discussions within the various risk groups regarding how duplicates and replicates are to be handled. It would be helpful if this item was expanded to clarify whether the data in question are separate samples from the same location or field-generated duplicates of the same sample; if relevant, how detected and non-detected concentrations would be combined; how many such samples are involved; and whether this approach is consistent with the data-use rules for other data uses.
- 2. The outlier analysis presented to identify "primary" outliers seems subjective and not particularly consistently applied. No justification was provided to support the comparison approach used, nor was it clear whether the potential outlier was compared to a mean that included the potential outliers or not. Given the often dramatic visual separation between the potential outliers and the rest of the data, it appeared to us that, as a minimum, basing the outlier analysis on a further round of statistical testing would be more appropriate, e.g., statistically testing the means generated without the potential outliers to determine the probability that the outliers are members of the same population.
- 3. We also note that outlier identification was supposed to be based on consideration of "(i) cooccurrence with outliers for other chemicals at single stations; (ii) small-scale heterogeneity in chemical concentrations at clustered locations; (iii) proximity to potential chemical sources; and (iv) temporal trends in concentrations" (page 4 of the memo). It was our understanding that these lines

of evidence would be considered first before other tests were applied, i.e., on what the memo refers to as the potential outliers, not on a reduced set. As an example, a visual examination of the Total PCB Aroclor data appear to show a "cluster" of high concentrations around RMs 16 to 17, which includes the five highest concentrations, four of which were identified as potential outliers. In addition, none of the other substances presented appears to be elevated in the same reach. Thus two of the indicators that the high PCB concentrations are outliers were met, but none of these samples were retained as primary outliers.

PRGs

4. According to LWG's table containing potential sediment PRGs for ecological receptors, PRGs for ammocoetes would be developed only based on tissue residues. The problem formulation indicates that risks would be evaluated through comparisons to sediment concentrations in basically the same way as for the benthic organisms; therefore, 'S' should appear in the Detritivore column for all of the chemicals that are being similarly evaluated for the other benthic species.

We don't have any other specific comments on the approach outlined in the PRG Meeting Summary; however there are still several unresolved issues (e.g., ARARs, FWM, and BSAFs) that we will continue to track.

Please let me know if there is anything we need to discuss further before tomorrow's call. Thanks, Sheila